PERSPECTIVES







Should Health Care Institutions Mandate SARS-CoV-2 Vaccination for Staff?

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Health care workers have been prioritized for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) vaccination, but vaccine hesitancy among workers may limit uptake. Institutions may wish to consider SARS-CoV-2 vaccine mandates for health care workers, but such proposals raise important ethical questions. Arguments supporting mandates emphasize the proposed favorable balance of harms and benefits for both individuals and communities, as well as moral duties of health care workers and organizations. Arguments in opposition seek to challenge some claims about utility and raise additional concerns about infringement on autonomy, damage to organizational relationships, and injustice. While available SARS-CoV-2 vaccines remain under an experimental designation, mandates may be excessively problematic, but following approval by the Food and Drug Administration mandates may be reconsidered. The authors summarize ethical arguments and practical considerations, concluding that mandates may be ethically permissible in select circumstances.

The Emergency Use Authorization by the Food and Drug Administration (FDA) of 3 highly effective vaccines against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has been a source of hope in a protracted pandemic. Health care workers have been prioritized for vaccination for multiple reasons: to protect a population likely to encounter patients with coronavirus disease 2019 (COVID-19), to prevent transmission to patients, to preserve health care capacity, and to facilitate vaccine distribution. But health care workers are not immune to vaccine hesitancy. Uptake of the SARS-CoV-2 vaccine has been uneven, with reported acceptance rates ranging from <50% to nearly 100% in different institutions [1].

Received 15 January 2021; editorial decision 22 March 2021; accepted 23 March 2021.

Open Forum Infectious Diseases®2021

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Reasons for hesitancy include the novelty of the vaccine and the mRNA-based mechanism, the accelerated development and authorization process, reports of side effects, perceived low risk of transmission, and even skepticism about the seriousness of COVID-19 illness. These concerns may be in addition to broader skepticism about the trustworthiness, safety, and utility of vaccination in general [2]. Confronted with high rates of vaccine refusal, some centers have considered mandating SARS-CoV-2 vaccination among workers with direct patient contact. While available vaccines remain under an emergency use authorization, mandates have been called "legally and ethically problematic" because vaccines are still considered experimental [3]. However, emerging challenges in vaccination of health care workers should prompt planning for future approval of SARS-CoV-2 vaccines. We consider ethical arguments for and against vaccine mandates, addressing the domains of utility, duties, autonomy, care, and justice.

IN FAVOR OF MANDATES

Widespread vaccination of health care workers achieved through mandates

could be expected to have a favorable balance of benefits and harms, in alignment with the ethical principles of beneficence and nonmaleficence. Health care workers have been prioritized for SARS-CoV-2 vaccination because of the individual and community benefits anticipated from protecting this group. If voluntary uptake remains low, these benefits would be attenuated. Mandatory vaccination could help to ensure the safety of a larger group of health care workers. Arguments in favor of mandates generally assume that vaccination will also reduce transmission, so that these benefits would be extended to include patients and visitors. Beyond the health care setting, successful vaccination of health care workers sets a valuable example for the public and enhances the credibility of public calls for vaccine acceptance. Vaccination against SARS-CoV-2 is not onerous and reasonably thought to be safe, so health care workers could be considered to have an ethical duty to take this step to protect patients as a kind of "easy rescue," a moral requirement to act when a lowburden action can save others from a much worse situation. Health care institutions also have a duty to provide a

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safe environment for their workforce, patients, and visitors, a duty that has been reiterated throughout the COVID-19 pandemic in discussions about personal protective equipment shortages. There is an established precedent for this proposal in influenza vaccine mandates for health care workers, which are considered justified intrusions on autonomy because of individual and community benefits. These benefits are even more urgently needed for the more prevalent, costly, and lethal SARS-CoV-2, which public messaging has repeatedly reminded us "is not the flu."

AGAINST MANDATES

Mandating vaccination would be an infringement on health care workers' autonomy. Where such infringements are permitted, they are based on a long, established track record of benefit and safety, as for influenza vaccination. In contrast, SARS-CoV-2 vaccines remain under an experimental designation, and some proposed benefits are uncertain. The role of vaccination in reducing disease transmission has yet to be demonstrated in high-quality studies and thus is a weak justification for mandates. Evidence also supports highly effective alternative strategies for interrupting transmission, including universal masking, prevalence testing, and cohorting of COVID-19 patients [4]. A SARS-CoV-2 vaccine mandate may also lead to harms not seen with mandates for influenza vaccination. If the consequences of a mandate lead to redeployment of staff who refuse vaccines, there may be shortages in critical areas, negating the proposed benefit of preserving a functioning health care system. Even as more data become available, SARS-CoV-2 vaccine mandates are likely to be controversial. Health care workers' enthusiasm for vaccination has been leveraged to promote vaccine acceptance in other populations. Authoritarian-appearing vaccine mandates could undermine this discourse

and have a negative effect on uptake. Mandates would also place vaccinehesitant health care workers explicitly in conflict with their institutions and leaders, adding to accumulated adverse experiences from a protracted pandemic and reinforcing any feelings of isolation, mistrust, or betrayal within these relationships. If those who refuse vaccination are excluded from certain types of work such as providing intensive care or are subject to 14-day quarantines with high-risk exposures, there may also be economic consequences, which deserve special consideration in a time when many families face challenges from loss of income. Finally, vaccine deliberation is more common among people of color as a consequence of untrustworthy actions by health care professionals and organizations through history to the present day [5]. Health care workers from minoritized backgrounds may be disproportionately affected by both the emotional and practical consequences of a SARS-CoV-2 vaccine mandate, raising concerns about justice.

PRACTICAL CONSIDERATIONS

Vaccine mandates may impose a spectrum of consequences, from simple opt-out options to mandatory counseling to redeployment, with differing ethical implications. One previously used proportional consequence for health care workers declining influenza vaccination-wearing a mask to work-is currently not relevant in the context of universal masking, but as restrictions relax, institutions will need to consider how unvaccinated employees will safely participate in in-person meetings, congregate at mealtimes, or otherwise gather. To reduce the need to impose negative consequences, interventions to promote vaccine acceptance should be a part of any vaccination program and can be implemented immediately. These might include targeted education, peer champions, or modest incentives like coffee and food. More substantial incentives may raise ethical questions similar to those related to mandates, but have also been proposed.

Some organizations may wish to consider mandates specifically for staff working with vulnerable patients. Immunosuppressed patients such as solid organ transplant recipients, bone marrow transplant recipients, or patients with cancer are frequently cohorted together and cared for by specialized teams. These patients are at higher risk for acquiring infection and go on to experience high rates of morbidity and mortality from COVID-19 [6]. Arguments emphasizing benefits for or duties to patients would be magnified in this context, and implementation may be more practical for these groups than for other vulnerable groups who are not cohorted together, such as elderly patients or patients of color. Still, alternative infection prevention strategies may be sufficient to protect vulnerable patients.

CONCLUSIONS

SARS-CoV-2 vaccine mandates for health care workers have the potential to secure important benefits for the individuals who are vaccinated and for the community, but at the expense of controversy, conflict, and infringement on autonomy. These costs can be expected to disproportionately affect minoritized health care workers unless comprehensive parallel interventions can earn broad vaccine acceptance. While vaccines are under Emergency Use Authorization, we agree with other authors that there is insufficient evidence or certainty of benefit to justify such costs. If a vaccine earns regulatory approval with a favorable profile of individual risks and benefits, and if it proves to reduce transmission to others, then vaccine mandates for health care workers may be reconsidered. It is the opinion of the authors that mandates would be ethically appropriate if and when these conditions are met, which is anticipated for many candidate SARS-CoV-2 vaccines, at least for those working with select high-risk patient populations. Institutions should prepare to address or mitigate ethical challenges by developing informational resources, soliciting diverse staff participation in policy development, and identifying proportional incentives and consequences.

Acknowledgments

Financial support. The authors report no funding source for this work.

Potential conflicts of interest. All authors: no reported conflicts of interest. All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

Patient consent. No patients were involved in this work.

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